

**CONSTRUCTION PLANS  
SECTION 4-200  
GRADING PLANS**

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## **4-200 GRADING PLANS**

### **4-201 PURPOSE**

Grading plans detail mass grading for the purpose of creating pads for building construction. These plans are generally associated with a tentative or final map for a subdivision or grading associated with private construction. All grading work shall be designed in accordance with Chula Vista Ordinance 1797, Chapter 15.04 of the Chula Vista Municipal Code.

### **4-202 FORM AND CONTENT**

#### **4-202.1 GENERAL**

- (1) Grading plans shall be prepared by a registered civil engineer and shall be accurate engineering drawings which are technically correct and complete and shall show in detail all grading, excavation and fill required and appurtenant structures to be constructed or installed.
- (2) Design criteria for all grading must conform to the standards set forth in Section 3 of this manual, Chula Vista Municipal Code Ordinances, Chula Vista Standard Drawings and Standard Specifications, the San Diego County Regional Standard Drawings and other specifications as may be deemed appropriate by the City Engineer.
- (3) Grading plans shall be clearly and legibly drawn on 24" x 36" (61cm X 91cm)(Chula Vista Standard D sheet) mylar (min. 3mils (0.08mm) thick) using black drawing ink only.
- (4) Hand lettering shall be a minimum of 1/8" (3mm) in height. Typed or computer generated lettering shall be a minimum of 1/10" (2.5mm) in height.
- (5) Minimum scale shall be 1" = 100' (1cm = 10m).
- (6) The engineer of work shall sign and stamp each sheet of the plans including engineer's registration number and expiration date.
- (7) Each sheet shall contain a title block as described in Section 4-202.2

**4-202.2 TITLE BLOCK;** - Each sheet shall contain the Chula Vista standard title block which includes the information described below. Standard D sheet size mylars with the title block are available from the City.

- (1) **Title** - Subdivision designation, the type of plan (i.e. mass grading), and the location or extent of such grading.
- (2) **Drawing Numbers** - Drawing numbers will be assigned by the Engineering Division usually after the first plan check.
- (3) **Sheet Numbers** - Sheets shall be numbered consecutively. Each sheet shall also show the total number of sheets in the plan.

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- (4) **Work Order Number** - The work order number shall be located above the title block over the block for drawing numbers. The work order will be assigned by the City and will be included in the first plan check comments.
- (5) **City Signatures** - Each sheet of the approved plans will contain the following City signatures:
- a) At approval, each sheet will be signed by a Senior Civil Engineer and the City Engineer. The cover sheet must allow a minimum 2" high X 5" wide (5cmX13cm) clear area above the City approval signature block to accommodate the Senior Civil Engineer's and City Engineer's stamps.
  - b) Office, Field, Traffic - These blocks will be initialed when approved by the appropriate City personnel.
- (6) **Engineer of Work Signatures** - This block must include the initials of the people responsible for designing, drafting and checking the plans as well as the signature and registration number of the engineer of work and the date signed.
- (7) **Scale** - Indicate the horizontal and vertical scale for each sheet.
- (8) **Bench Mark** - Bench mark description shall be shown on each sheet of the plans. Bench marks shall conform to Section 2-302.3 of this manual
- (9) **Revisions** - The reference number, description, approval signature and date shall be shown for each plan revision or construction change (see Section 4-500) on the each sheet affected. New mylars may not be submitted for construction changes unless otherwise approved by the City Engineer.
- (10) **Reference Drawings** - The drawing numbers for all existing and adjacent improvements shall be shown on each sheet.
- (11) **Construction Record** - The construction record shall include contractor's signature, inspectors' signature and date the plans are as-built (see Section 4-500).
- 4-202.3 **Title Sheet(s)**; - The title sheet for grading plans shall contain the following items:
- (1) Title - The subdivision name and unit number shall be placed in bold print at the top center of the title sheet.
  - (2) A vicinity map with north arrow and scale shall be indicated.
  - (3) A key map drawn to a scale of 1" = 200' (1cm=20m) shall be shown on the cover sheet which depicts the general plan of the subdivision to include roads adjacent to the subdivision, overall drainage plan, grading limits (including off-site grading); and, if applicable, the area of grading covered by each sheet. The key map shall have a north arrow and scale shown.

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- (4) Work to be done and legend. Items in the work to be done will vary with the grading and improvements to be constructed. Symbols used in legend shall conform with City of Chula Vista and San Diego Regional Standard symbols.
  - (5) A typical cross-section of each class of existing and proposed streets shall be shown. The typical section shall show roadway widths, right of way widths, side slopes, shoulders, curbs, gutters, sidewalks, medians, typical street light and fire hydrant locations, relationship of centerline grade to top of curb grade and subgrade or undercut boundary. The typical section shall also make reference to elevations as shown on the plan sheets. Typical street cross sections shall comply with City of Chula Vista Street Design Standards.
  - (6) A detail plan of a lot showing typical grading and drainage.
  - (7) Concise legal description defining the location of the work.
  - (8) Tax Assessor's parcel number(s).
  - (9) Name, address, telephone number and signature of the record owner or owners.
  - (10) Name, address and telephone number of the subdivider, if other than owner(s).
  - (11) Construction Notes - General, Special, Water, Sewer, Fire shall be added to the title sheet as necessary.
  - (12) NPDES Certificate is required on all grading plans.
  - (13) Engineer of Work Certificate. This certificate shall be complete and signed by the Engineer of Work as part of the as-built process (see Section 4-500).
  - (14) Declaration of Responsible Charge. This certificate shall be signed by the Engineer of Work prior to City approval.
  - (15) Soils Engineer certificate. This certificate shall be signed by the soils engineer of work prior to City approval.
  - (16) Other Agency Signatures. If approval is required from other agencies, the appropriate signature block for those agencies shall be added as deemed necessary by those agencies. Other agency signatures must be obtained prior to City approval of the improvement plans.
  - (17) Items that cannot fit on the cover sheet may be shown on the erosion control plan sheet.

#### 4-202.4 Erosion Control Plan

All grading plans shall include a plan for erosion control that contains the following:

- (1) Map of the entire subdivision at 1"=200' (1cm=20m) scale minimum showing placement of sandbag rows for temporary desilting basins within the streets;
- (2) Erosion control details including:

- a) Temporary desilting basins in the street with a table showing the spacing for the sandbag rows;
  - b) Cross section of the street desilting basins showing the height of the sandbags and weirs, street centerline, curblines, right-of-way line and undercut or subgrade line;
  - c) Temporary desilting basins at all inlets with a separate detail for sump conditions as necessary.
- (3) Erosion Control Notes as shown in Section 4-209.
- (4) Any notes or details that could not fit on the cover sheet.

#### 4-202.5 Plan Sheets

The plan sheets of the grading plans shall show sufficient detail of all proposed grading, excavation, fill, improvements and facilities to facilitate proper construction and inspection and at a minimum shall include the following:

- (1) North arrow.
- (2) Map Scale in words or figures and graphically.
- (3) Stationing shall generally be from left to right.
- (4) "As-Built" Certificate (to be completed through as-built process).
- (5) Existing Conditions - Existing improvements adjacent to the area of work or to be met by proposed work shall be shown by dashed lines. Any existing improvements to be relocated or removed shall be so noted on the plan sheet containing said improvements.
- (6) Grading Plans: Contours; Contour Lines - Existing and finish grade contour lines shall be shown and shall conform to the following:
  - a) Existing contour lines shall be « screened or dashed with the existing elevations enclosed in parenthesis;
  - b) Proposed contour lines shall be bold, solid lines with proposed elevations;
  - c) Contour lines shall be shown at the following intervals:

<u>Average Slope of Area</u>	<u>Contour Interval</u>
0-2%	1' (0.3m)
2-5%	2' (0.6m)
5-20%	5' (1.5m)
Over 20%	10' (3m)

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- d) Contour lines shall extend for a distance of 100 feet (30.5m) beyond the subdivision boundary for plans drawn at scale of 1"=40' (1cm=30m) and a distance of 50 feet (15m) for plans at 1"=20' (1cm=15m).
- (7) All existing underground utilities or facilities (sewer, water, gas, drainage) shall be shown, labeled, and dimensioned on both the plan and profile. Existing underground utilities shall be extended beyond the limits of work at least 50 feet (15m).
- (8) All proposed drainage structures or facilities required to drain the site post-grading shall be shown and if temporary so indicated. If ultimate storm drain facilities are to be constructed, include full data including plan and profile drawings unless storm drains are included on improvement plans and an advanced permit for storm drain construction will be requested. In such case, only the pipe size and length need be shown on the grading plans.
- (9) The following information shall be shown for each lot:
- a) pad elevation for each lot;
  - b) finished grade elevations at the intersection of side lot lines and right-of-way lines;
  - c) lengths of all lot lines;
  - d) building set back lines
- (10) Subdivision boundary shall be fully dimensioned including bearings, distances, curve radii, angles and lengths.
- (11) Existing survey monuments shall be shown.
- (12) Existing right of way, property lines, contour lines and improvements, in or adjacent to area to be graded.
- (13) New right of way, property lines, contour lines and lot numbers of area being improved.
- (14) Streets - The following data shall be shown for all streets:
- a) Centerline shown by standard symbol. The centerline shall be stationed at each 500 feet (200m) with "tick marks" at 100' (30m) intervals, and B.C.'s and E.C.'s shall be stationed;
  - b) Street names shown within each street;
  - c) Finished grade elevations at all street centerline intersections;
  - d) Centerline finished grade elevation at all BC's, EC's, BVC's, EVC's, and centers of cul-de-sacs.

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- (15) Show flowline elevations of cross gutters (per CVCS 2), channels and ditches to be constructed.
- (16) The following information shall be shown for all storm drain facilities:
- a) Size
  - b) Length
  - c) Grade
  - d) Material
- (17) If storm drain design is shown on the grading plans, the following additional information must be shown:
- a) Encasement and special bedding requirements.
  - b) Location by street stationing and dimensions from centerline of street.
  - c) Data tables for all storm drain pipe (if storm drain design on the grading plans).
  - d) Details for all drainage facilities that are not to be constructed in accordance with Standard Drawings including detail plan view, cross-sections, and typical sections.
  - e) Drainage pipe gauge, or D-load may be stated in the general notes. In such case the pipe gauge or D-load for only those segments that don't conform to the note need be shown on the pipe profile.
  - f) Profile plot of all storm drain facilities including pipes and inlets.
- (18) All slopes shall have a maximum slope ratio of 2:1. All fill slopes shall be shaded and the cut/fill line shall be shown and clearly identified.
- (19) Slopes within street tree easements shall have a maximum slope ratio of 5:1 unless otherwise approved by the City Engineer.
- (20) Show top and bottom elevations of all retaining walls appurtenant to the proposed grading. Said retaining walls shall be in accordance with San Diego Area Regional Standard Drawings, or as approved by the City Engineer. Details for non-standard walls shall be shown on the grading plans.
- (21) Limits of grading operations shall be clearly shown on each sheet and a reference to any letters of permission to grade shall be shown where appropriate.
- (22) Show existing and proposed drainage, sewer, street tree planting and pedestrian easements.
- (23) Clearly identify all City or County boundaries
- (24) Show seismic fault lines

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**4-202.6 Landscape Improvement Plans**

(1) Landscape improvement plans in conformance with the Chula Vista Landscape Manual and Section 4-300 of this manual, shall be submitted and approved prior to issuance of a Land Development (grading) permit or other permit to grade, excluding mass grading permit.

(2) Grading plans for mass grading shall show the hydroseed components on the erosion control sheets(s)

(3) For purposes of this section, mass grading is defined as grading which does not include finished pads and/or street cuts.

**4-203 PROCESSING**

**4-203.1 Submittal Requirements**

(1) Submittals will only be accepted in conformance with Section 5-203 of this manual

(2) First Submittal - The first submittal package includes but is not limited to the following:

- a) Initial plan check deposit
- b) Executed Development Agreement (unless previously filed)
- c) Blueline copies of Grading Plan per Section 5-201
- d) Hydraulic calculations with a drainage basin map.
- e) Soils Report - (preliminary and final) 2 copies, signed and stamped by a registered civil engineer whose primary expertise is soils engineering, and 2 microfiche.

The report shall present all the geological information for the area pertinent to the proposed grading. Cross sections of existing and proposed significant slopes that may be unstable must be included. The geology map must utilize a copy of the latest grading plan as a base. The scale of the map should be appropriate to permit sufficiently accurate measurements for analysis of remedial design and construction. Generally, for geologic purposes, the scale of the map and cross sections should be prepared at a minimum scale of 1 inch equals 100 feet. If the grading plan is revised, a geology map and cross section(s) should be prepared based on the new plan.

- f) Geologic and Seismic reports as required by the City Engineer.
- g) Design data and/or calculations for special structures or retaining walls.
- h) Engineer's estimates for grading, appurtenant structures, slope landscape & irrigation, and landscape maintenance and water costs for at least one year (may be submitted with later plan check). Cost estimates shall be calculated using the



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current "City of San Diego Unit Price List for Estimating Subdivision and Permit Bonds".

- i) Notarized letter of permission to grade from adjacent property owners for all off-site grading.
  - j) A list of lot within the subdivision indicating whether they are located on areas or cut, fill, or transition between cut and fill.
  - k) Other items as specified by City Council in approval of associated tentative map (if any).
- (3) Subsequent Plan Check - Subsequent plan check submittals shall include but not be limited to:
- a) 2 revised blueline copies;
  - b) Original City plan check comments;
  - c) Other information and documentation as requested.
- (4) Additional Items Required Prior Plan Approval:
- a) Inspection and plan check deposits as required by the City Engineer;
  - b) Grading and Erosion Control Bonds. Approved bond amounts shall be based on the Engineer's approved construction cost estimate and in accordance with Section 18.16.220 of the City's Municipal Code.
  - c) Easements for off-site appurtenant structures.
  - d) Notarized letter of permission to grade from adjacent property owners for all off-site grading with copy of approved portion of plan attached and initialed.
  - e) Any other required deeds, easements, and/or agreements.
  - f) Compliance with all outstanding conditions of approval related to grading (if any).
  - g) Signed mylars of the grading, erosion control and landscape improvement plans. Plans must be signed by all parties except the City prior to City approval. Landscape improvement plans must be approved by the City prior to issuance of a land development permit, except for mass grading.
  - h) Completed Land Development Permit application form.
- (5) See Table 5-202.5 for Plan and Bond requirements.

#### **4-203.2 Approval**

- (1) When it has been determined that the grading plans are complete, technically correct, and in accord with the final map or parcel map, and all required signatures obtained, then the grading plans will be approved by the City Engineer.

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- (2) Approval of the grading plans does not constitute a permit to grade. An advance land development permit is required.

4-203.3 **Land Development Permits;** shall be required for all grading operations, including brushing and clearing as applicable, pursuant to the Chula Vista Municipal Code (Ordinance 1797).

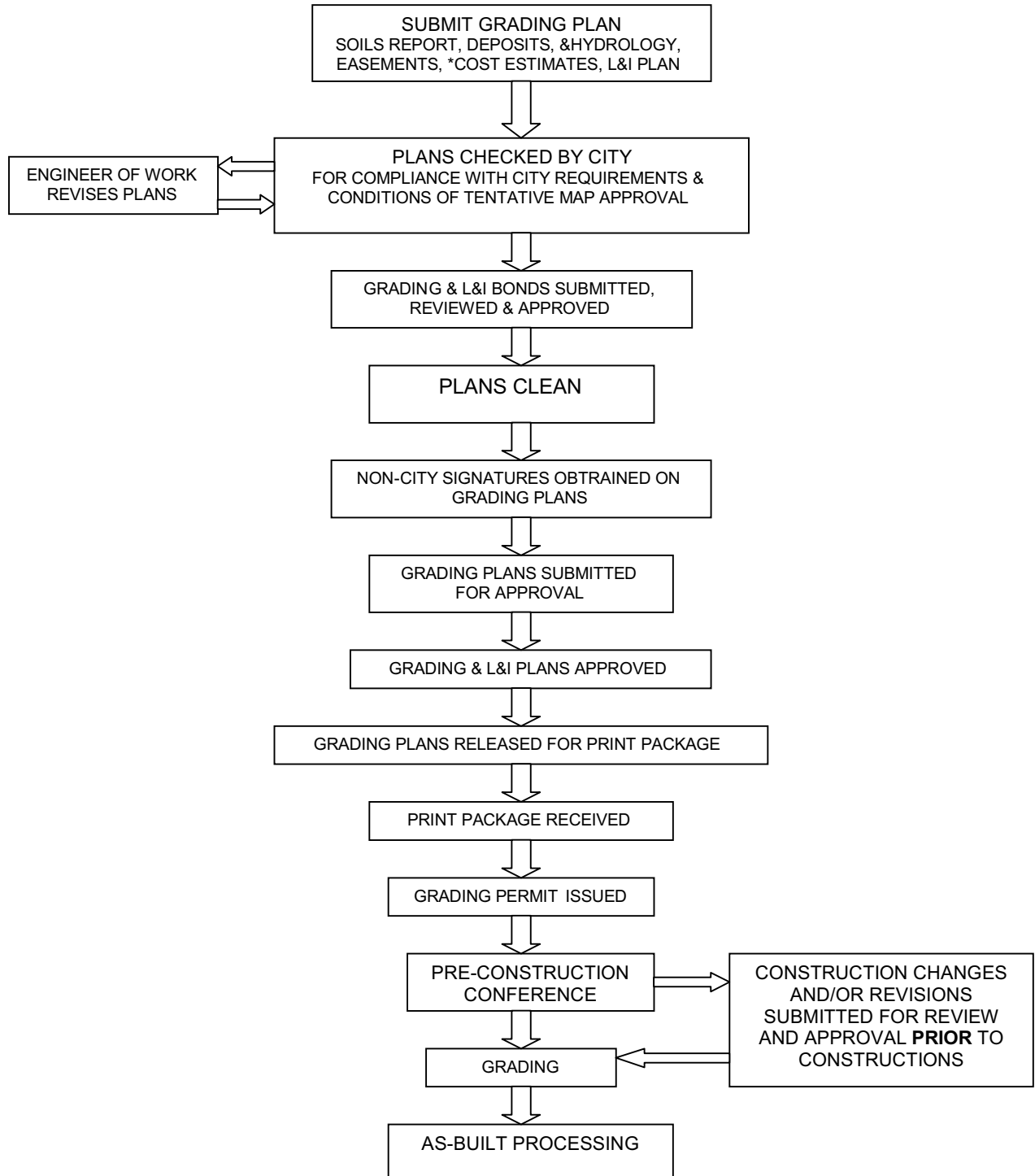
- (1) Land Development Permits shall be valid for the time period specified on the permit. If no date is specified, the permit shall be valid for 180 days after issuance of the permit. If the work cannot be completed within the specified time, the permittee may request an extension of the permit. Such a request must be submitted in writing and sufficiently in advance of the expiration of the permit to allow processing and approval of the extension prior to expiration of the permit. The City Engineer may grant one extension and said extension shall not exceed the original length of time designate on the permit.

- (2) Land Development Permits to be issued for grading associated with a proposed subdivision shall not be issued prior to approval of the tentative map or tentative parcel map for said subdivision.

4-203.4 **Print Package;** - Signed grading plans will be released only to blueprint companies bonded with the City. Engineer of work shall be responsible to provide the City with a full size mylar set of the grading plans (min. 3 mils (0.08mm) thick) and the required number of blue line copies (see Section 5-201).

4-203.5 **As-Builts** - As-built plans and reports shall be prepared in accordance with Section 15.04.140 of the Chula Vista Municipal Code.

4-204 GRADING PLAN FLOW CHART



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**4-205 SAMPLE GRADING PLAN SHEETS**

4-205.1 SAMPLE TITLE SHEET

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4-205.2 SAMPLE EROSION CONTROL PLAN

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**4-206 SAMPLE LAND DEVELOPMENT PERMIT**

4-207 SAMPLE GRADING BOND FORM

**GRADING AND/OR DRAINAGE BOND**

File No.: \_\_\_\_\_  
Bond No.: \_\_\_\_\_  
Premium: \_\_\_\_\_

KNOW ALL PERSONS BY THESE PRESENTS that we, \_\_\_\_\_  
\_\_\_\_\_, a corporation of \_\_\_\_\_  
as Principal, and \_\_\_\_\_ of  
\_\_\_\_\_, a corporation incorporated under the laws of  
the State of \_\_\_\_\_ and duly authorized under the State of California to act  
as Surety, are held and firmly bound unto the City of Chula Vista in the sum of  
\_\_\_\_\_ (\$ \_\_\_\_\_), lawful money of the  
United States of America, for the payment whereof, well and truly to be made, said Principal  
and Surety bind themselves, their heirs, administrators, successors and assigns, jointly and  
severally, firmly by these presents.

The condition of the foregoing obligation is such that whereas the above-bound Principal has  
agreed to provide certain improvements for the property known as  
\_\_\_\_\_, in accordance with  
\_\_\_\_\_, and is required by said City of Chula  
Vista, to give a bond to guarantee the performance and completion of said improvements.

NOW, THEREFORE, if the said Principal shall well and truly perform all work specified in said  
permit, drawings, or agreement, then this obligation shall be null and void, otherwise it shall  
remain in full force and effect. In addition, this bond shall be conditioned on the Surety's full  
compliance with all terms and conditions of the required Land Development Permit, including  
the provision specifying a time limit; and further conditioned upon full compliance with the  
ordinances and standards of the City of Chula Vista including, but not limited to, Chapter 15.04  
and Chapter 18.36 of the Chula Vista Municipal Code.

As part of the obligation secured hereby and in addition to the face amount specified therefor,  
there shall be included costs and reasonable expenses and fees, and including reasonable  
attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as  
costs and included in any judgment rendered.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or  
addition to the terms of said Permit or to the work to be performed thereunder or the  
specifications accompanying the same shall in anywise affect its obligations on this bond, and it  
does hereby waive notice of any such change, extension of time, alteration or addition to the  
terms of the Permit or to the work or to the specifications.

SIGNED AND SEALED AT \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

\_\_\_\_\_  
Bond / Policy No.



**(Notary Acknowledgment and Corporate Authorization Required for Each Signatory)**

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\_\_\_\_\_  
Name of Principal (Applicant)

By \_\_\_\_\_

By \_\_\_\_\_

\_\_\_\_\_  
Name of Surety Company

By \_\_\_\_\_

\_\_\_\_\_  
Address of Surety Company

\_\_\_\_\_  
City                      State              Zip Code

NOTE: FOR CURRENT BOND FORMS SEE: [www.ci.chula-vista.ca.us](http://www.ci.chula-vista.ca.us)

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**4-208 GRADING PLAN CHECKLIST  
CITY OF CHULA VISTA**

SUBDIVISION \_\_\_\_\_

TRACT NO. \_\_\_\_\_

Property Owner(s): \_\_\_\_\_  
&  
Address \_\_\_\_\_

Engineer/Surveyor: \_\_\_\_\_

PHONE: \_\_\_\_\_

*(References are to City of Chula Vista Subdivision Manual)*

ITEM		CHECK	REMARKS
<b>4-203.1 SUBMITTAL PACKAGE – Plans, Reports, Statements &amp; Exhibits</b>			
1. First Submittal	<b>Amount</b>		
a. Initial Deposit	\$ _____		
b. Development Processing Agreement executed			
c. Blueline copies			
d. Hydraulic Report including dry lane calc's			
e. Soils Report – 2 copies			
f. Design data and/or calculations for special structures			
g. Engineer's grading bond estimate (including appurtenant structures)			
h. Notarized letters of permission to grade			
i. Landscape & Irrigation Plans			
j. List of lots on cut, fill, or transition			
k. Geologic and/or Seismic Report if required			

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ITEM	CHECK	REMARKS
2. Prior to Approval		
a. Inspection deposit		
b. Approved Landscape & Irrigation Plans		
c. Grading and Landscape & Irrigation bonds		
d. Easements and/or deeds required		
e. Mylar (min. 3 mils thick)		
f. Completed Land Development Permit application form		
g. Print Package – Grading Plans		
<b>4-202.1 FORM AND CONTENT – General</b>		
1. Legibly drawn on mylar, sepia or other approved media		
2. 24" x 36" (61cm x 91cm) with 1" (2.5cm) margin		
3. Lettering size – 0.10 in (2.5mm) computer; 1/8" (3mm) hand in black drawing ink		
4. Scale: 1" = 40' (1cm = 10m) minimum in both words and graphically and north arrow		
5. Engineer of Work signature and stamp on each sheet		
<b>4-202.2 TITLE BLOCK</b>		
1. Title – Subdivision Name, type of improvement & location		
2. Drawing Nos. – add when assigned		
3. Sheet Numbers		
4. Work Order Number – add when assigned		
5. City Approval Signature – when approved		
6. Office, Field, Traffic Initials – when approved		
7. Engineer of Work Signatures – designer, drafter, plan checker, Engineer of Work Signature & Stamp		
8. Scale		

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ITEM	CHECK	REMARKS
9. Bench Mark		
10. Revisions – complete when as-built		
11. Reference Drawings		
12. Construction Record – complete when as-built		
<b>4-202.3 TITLE SHEET</b>		
1. Title – subdivision name and unit number		
2. Vicinity map with north arrow and scale		
3. Key map – including: a. North Arrow		
b. Scale: 1" = 200' (1cm = 20m)		
c. General Plan of subdivision showing boundary, streets and lots		
d. Adjacent Subdivisions & connecting streets shown		
e. Sheet coverage		
f. Legend identifying symbols used		
g. Drainage facilities		
h. Direction of drainage flow		
4. Work to be Done & Legend		
5. Typical street cross sections		
6. Detail showing typical lot grading		
7. Legal Description		
8. Tax Assessor's Parcel Number(s)		
9. Owner's name, address, phone & signature		
10. Developers' name, address, phone & signature (if other than owner)		

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ITEM	CHECK	REMARKS
11. Construction Notes – General, Special, Water, Sewer, Fire, etc (see Section 4-207)		
12. NPDES Certificate		
13. Engineer of Work (as-built) certificate		
14. Declaration of Responsible Charge		
15. Soils Engineer Certificate		
16. Other agency signatures		
<b>4-202.4 EROSION CONTROL PLAN</b>		
1. North arrow		
2. Scale (min. 1" = 200' (1cm = 20m)) shown both in words or figures and graphically		
3. Placement of sandbags, temporary desilt basins, etc shown		
4. Erosion control details for temporary desilt basins, etc.		
5. Erosion control notes		
<b>4-202.5 PLAN SHEETS</b>		
1. North Arrow		
2. Scale		
3. Centerline stationing every 500' (200m) with tick marks @ 100' (30m) intervals		
4. As Built Certificate shown on each sheet		
5. Existing conditions shown screened or dashed		
6. Existing contour lines screened		
7. Proposed contour lines bold		
8. Contour interval as appropriate (typical 2' (0.6m))		

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ITEM	CHECK	REMARKS
9. All existing underground utilities and facilities shown to 50' (15m) beyond limits of grading		
10. Proposed drainage facilities required to drain site shown		
11. Pad elevations, finish grade at right-of-way, lot line lengths and building set backs shown for each lot		
12. Subdivision boundary fully dimensioned		
13. Existing survey monuments shown		
14. Existing right-of-way, property lines, contour lines and improvements		
15. New right-of-way, property lines, contour lines and lot numbers shown		
16. Street centerline, names, stationing, width, grade, and direction of drainage flow		
17. Finished grade at centerline BC's, EC's, BVC's, EVC's, centerline intersections, and centers of cul-de-sacs shown		
18. Slopes: 2:1 max; fill slopes shaded; cut/fill line shown		
19. Flow line elevations of all cross gutters shown		
20. All drainage facilities including size, length, grade, material shown		
21. Storm drain design data shown (unless shown on improvement plans)		
22. All existing and proposed easements shown		
23. City and/or County boundaries shown		

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**4-209 TYPICAL GRADING PLAN NOTES**

GENERAL NOTES

1. THE SOILS REPORT TITLED \_\_\_\_\_ (SOILS REPORT TITLE & DATE) \_\_\_\_\_ FROM \_\_\_\_\_ (FIRM NAME) \_\_\_\_\_ SHALL BE CONSIDERED TO BE PART OF THIS GRADING PLAN. ALL GRADING SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN SAID REPORT.
2. STORM DRAINS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF SIZES, LOCATIONS, AND TYPE OF SEWER AND DRAINAGE FACILITIES, OR ANY SURFACE IMPROVEMENTS WITHIN FUTURE STREET RIGHTS-OF-WAY SHOWN ON THESE PLANS. SEPARATE APPROVALS AND PERMITS FOR THESE SHALL BE REQUIRED IN CONJUNCTION WITH IMPROVEMENT PLANS.
3. WRITTEN PERMISSION SHALL BE OBTAINED FOR ANY OFF-SITE GRADING
4. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES DURING GRADING OPERATIONS. ANYTHING DAMAGED OR DESTROYED SHALL BE REPLACED OR REPAIRED TO CONDITION EXISTING PRIOR TO GRADING.
5. THE DEVELOPER SHALL BE RESPONSIBLE THAT ANY MONUMENT OR BENCH MARK WHICH IS DISTURBED OR DESTROYED THROUGH GRADING OPERATIONS SHALL BE RE-ESTABLISHED AND REPLACED BY A REGISTERED CIVIL ENGINEER WHO IS ALLOWED TO PRACTICE LAND SURVEYING, OR A LICENSED LAND SURVEYOR, AND A CORNER RECORD, RECORD OF SURVEY, OR CERTIFICATE OF CORRECTION FILED AS REQUIRED BY THE LAND SURVEYORS' ACT.
6. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.
7. ALL FLOWS SHOWN ARE FOR 100-YEAR STORM.
8. ALL SEDIMENTATION BASINS, OUTLET PIPES AND DITCHES ARE PRIVATE UNLESS OTHERWISE NOTED AND HAVE NOT BEEN REVIEWED FOR ADEQUACY BY THE CITY ENGINEERING DEPARTMENT.
9. THE OWNER MUST OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (D.O.S.H.) FOR CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE FIVE FEET OR DEEPER INTO WHICH A PERSON IS REQUIRED TO DESCEND. SAID PERMIT IS REQUIRED PRIOR TO ISSUANCE OF A GRADING PERMIT BY THE CITY OF CHULA VISTA.
10. GRADING EQUIPMENT SHALL NOT USE OR BLOCK TRAFFIC LANES DURING GRADING ACTIVITY, TRUCK OPERATIONS IN AND OUT OF CONSTRUCTION AND STAGING AREAS SHALL BE CONTROLLED AS REQUIRED BY THE CITY. TRUCK AND EQUIPMENT ROUTES IN AND OUT OF THE SITE, SHALL BE APPROVED BY THE CITY PRIOR TO

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START OF WORK. AT THE END OF THE WORKING DAY, STREETS SHALL BE CLEANED OF DIRT AND CONSTRUCTION DEBRIS TO THE SATISFACTION OF THE CITY INSPECTOR AND THE MITIGATION MONITOR.

11. DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL COMPLY WITH LOCAL DUST CONTROL, ALL REQUIREMENTS OF ALL MITIGATION MONITORING PROGRAMS, AND UNIFORM BUILDING CODE (UBC) REQUIREMENTS, WHICH INCLUDE DUST CONTROL MEASURES FOR CONSTRUCTION SITES. DUST REDUCING MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, REGULAR WATERING OF GRADED SURFACES AND RESTRICTION OF ALL CONSTRUCTION VEHICLES AND EQUIPMENT TO TRAVEL ALONG ESTABLISHED AND REGULARLY WATERED ROADWAYS AT SPECIFIED SPEEDS.

#### NOTIFICATIONS

1. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORD, TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN HEREON, HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT UNDERGROUND SERVICE ALERT (PHONE 1-800-422-4133) TWO (2) WORKING DAYS IN ADVANCE OF ANY EXCAVATION FOR THE MARK OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.

FOR ANY QUESTIONS REGARDING THE MARK OUT OF UNDERGROUND UTILITIES, THE CONTRACTOR SHOULD CONTACT THE RESPECTIVE UTILITY COMPANY:

STREET LIGHT OR SIGNAL LIGHT CONDUIT	CITY OF CHULA VISTA	(619) 397-6163
SEWER OR STORM DRAIN	CITY OF CHULA VISTA	
	VERIFICATION	(619) 691-5024
	NOTIFICATION	(619) 397-6000
GAS & ELECTRIC	SAN DIEGO GAS & ELECTRIC CO.	1-800-227-2600
		(619) 230-7800
WATER	OTAY WATER DISTRICT	(619) 670-2222
	SWEETWATER AUTHORITY	(619) 420-1413
TELEPHONE	PACIFIC BELL	(619) 266-4683
TELEVISION	COX CABLE OF SAN DIEGO	(619) 263-9251/ (619) 266-5597
	ULTRONICS	(619) 476-0177



2. CONTRACTOR SHALL NOTIFY THE CITY ENGINEER'S OFFICE (PHONE 619-397-6128) AND THE MITIGATION MONITOR AT THE PLANNING DIVISION (PHONE 619- 691-5101) 48 HOURS (2 WORKING DAYS) PRIOR TO BEGINNING ANY WORK ON THIS PROJECT.
3. THE CONTRACTOR SHALL GIVE 24 HOURS (ONE WORKING DAY) NOTICE ON CALLS FOR INSPECTION. PHONE: 397-6128.
4. ALL WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL AT CONTRACTOR'S EXPENSE.

**SPECIAL NOTES**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE QUANTITIES SHOWN HEREON AND BALANCING THE EARTHWORK ONSITE. IF DISCREPANCIES ARISE, THE ENGINEER OF WORK SHALL PROVIDE AREAS OF ADJUSTMENT TO THE CONTRACTOR. WHERE TRENCHES ARE WITHIN EASEMENTS, STREETS, OR 10' OF ANY BUILDING, SOILS REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF WORK BY A QUALIFIED SOILS ENGINEER WHICH INDICATE THAT THE TRENCH BACKFILL WAS COMPACTED UNDER THE OBSERVATION OF THE SOILS ENGINEER AND IN ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL SLOPES ARE BUILT IN ACCORDANCE WITH THESE PLANS. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER AT (ENGINEER OF WORK PHONE NO.).
3. THE PALEONTOLOGICAL MONITOR SHALL BE PRESENT DURING THE GRADING OF THE PLIOCENE SAN DIEGO FORMATION (TSD) ON THE SITE. THE MONITOR SHALL HAVE THE AUTHORITY TO TEMPORARILY DIRECT, DIVERT, OR HALT GRADING TO ALLOW RECOVERY OF FOSSIL REMAINS.
4. THE CONTRACTOR SHALL UNCOVER ALL UTILITIES THAT MAYBE JOINED, CROSSED, OR PARALLELED TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATION PRIOR TO ANY CONSTRUCTION. ANY CONFLICT OR DISCREPANCY SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO CONSTRUCTION. OTHERWISE THE CONTRACTOR ACCEPTS FULL RESPONSIBILITY FOR ANY ADDITIONAL CONSTRUCTION OR RELOCATION COSTS.
5. ALL FILL AREAS, WHICH ARE FENCED, SHALL REMAIN FENCED. TEMPORARY AND/OR FINAL FENCING SHALL BE PROVIDED AS SHOWN ON THE PLANS.
6. ALL APPROVED GEOTEXTILE ENGINEERING FABRIC SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
7. A 6" MINIMUM THICKNESS BEDDING BLANKET UNDERLAIN BY A LAYER OF GEOTEXTILE (MIRAFI 700X OR EQUIVALENT) SHALL BE CONSTRUCTED BENEATH ALL RIP RAP. THE BEDDING BLANKET SHALL MEET THE FOLLOWING SPECIFICATIONS:
  - a. FRACTION PASSING THE NO. 3/8 IN. STANDARD SIEVE SHALL BE 100% BY WEIGHT.

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- b. ANY SOURCE OF ON-SITE MATERIAL DEEMED SUITABLE BY THE SOILS ENGINEER.
  - 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING, RELOCATING, AND OR REMOVING EXISTING UTILITIES.
  - 9. THE CONTRACTOR SHALL REPLACE ALL DESTROYED OR DAMAGED SURFACE IMPROVEMENTS WITH IMPROVEMENTS EQUAL OR SUPERIOR.
  - 10. ALL CONTOURS AND ELEVATIONS SHOWN HEREON REPRESENT FINISH GRADE. CONTRACTOR SHALL MAKE THE APPROPRIATE ALLOWANCES FOR PAVEMENT SUBGRADE, PAD UNDERCUT, AND UTILITY TRENCHING.
  - 11. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS AND THE CITY OF CHULA VISTA.

**GRADING NOTES**

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE APPROVED PLANS AND APPROVED REVISIONS. ANY CHANGES OR REVISIONS THERETO SHALL BE APPROVED BY THE CITY ENGINEER AND MITIGATION MONITOR PRIOR TO ANY REQUEST FOR INSPECTION.
- 2. ALL GRADING SHALL BE INSPECTED AND TESTED BY OR UNDER THE DIRECTION OF A QUALIFIED SOILS ENGINEER. THE SOILS ENGINEER SHALL: INSPECT THE EXCAVATION, AND SHALL OBSERVE AND TEST THE PLACEMENT, AND COMPACTION OF FILL AND BACKFILL AND COMPACTION OF TRENCHES; SUBMIT GEOTECHNICAL OR SOILS REPORTS AS REQUIRED AND DETERMINE THE SUITABILITY OF ANY FILL MATERIAL UPON COMPLETION OF GRADING OPERATIONS. THE SOILS ENGINEER SHALL STATE THAT OBSERVATIONS AND TESTS WERE MADE BY, OR UNDER DIRECTION OF THE SOILS ENGINEER, AND THAT EMBANKMENTS AND EXCAVATIONS WERE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL ASPECTS OF THE APPROVED GRADING PLANS, ANY APPROVED REVISIONS THERETO, SUBJECT LAND DEVELOPMENT PERMIT AND ORDINANCE NO. 1797 AS AMENDED, AND THAT ALL EMBANKMENTS AND EXCAVATIONS ARE ACCEPTABLE FOR THEIR INTENDED USE.
- 3. THE CONTRACTOR SHALL PROPERLY GRADE ALL EXCAVATED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. CONTRACTOR SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISHED WORK ON THE SITE, AND SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED TO THE SATISFACTION OF THE CITY ENGINEER AND THE MITIGATION MONITOR.
- 4. ALL AREAS TO BE FILLED SHALL BE PREPARED PRIOR TO FILLING, AND FILL SHALL BE PLACED IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN THE SOILS REPORT. ALL VEGETABLE MATTER AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED, BY THE CONTRACTOR, FROM THE SURFACE UPON WHICH THE FILL IS TO BE PLACED. LOOSE FILL AND UNSUITABLE SOILS SHALL BE REMOVED TO SUITABLE FIRM

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NATURAL GROUND. THE EXPOSED SOILS SHALL BE SCARIFIED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND THEN COMPACTED TO A MINIMUM OF 90% OF ASTM-D1557. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, WATER AND COMPACT THE FILL IN STRICT ACCORDANCE WITH THE SPECIFICATIONS.

5. CUT AND FILL SLOPES SHALL BE CUT AND TRIMMED TO THE FINISHED GRADE TO PRODUCE SMOOTH SURFACES AND UNIFORM CROSS SECTIONS. THE SLOPES OF EXCAVATIONS AND EMBANKMENTS SHALL BE SHAPED, TRIMMED, AND PLANTED IN ACCORDANCE WITH THE PLANTING NOTES AND AS DIRECTED BY THE ENGINEER OF WORK, AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS AND OTHER WASTE MATERIALS EXPOSED ON THE EXCAVATION OR EMBANKMENT SLOPES WHICH ARE LIABLE TO BECOME LOOSENEED, SHALL BE REMOVED AND DISPOSED OF. THE TOE AND TOP OF ALL SLOPES SHALL BE ROUNDED IN ACCORDANCE WITH ORDINANCE NO. 1797, THESE GRADING PLANS, AND THE STANDARD DRAWINGS CVDS 26 AND 27. SLOPE SETBACKS AND GRADES SHALL CONFORM TO CVDS 25.
6. IF THERE ARE EROSION SCARS ON EXISTING SLOPES WHICH OTHERWISE WOULD NOT BE ELIMINATED BY THE PROPOSED GRADING, THESE SCARS ARE TO BE ELIMINATED BY TRIMMING, FINE GRADING AND PLANTING. IF THE SCARS ARE IN AREAS OF NATIVE VEGETATION, THE REPAIRS SHOULD BE PERFORMED WITH AN EFFORT TO AVOID OR MINIMIZE IMPACTS TO NATIVE VEGETATION. ALL SUCH REPAIRS IN AREAS OF NATIVE VEGETATION SHALL BE REVIEWED AND APPROVED BY THE CITY'S MITIGATION MONITORING COORDINATOR PRIOR TO THE BEGINNING OF THE REPAIR WORK.
7. ALL TREES, BRUSH, GRASS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE COLLECTED, PILED OR OTHERWISE DISPOSED OF OFF THE SITE BY THE CONTRACTOR SO AS TO LEAVE THE AREAS THAT HAVE BEEN CLEARED WITH A NEAT AND FINISHED APPEARANCE FREE FROM UNSIGHTLY DEBRIS. APPROVAL OF LOCATIONS FOR DEBRIS FILL SHALL BE OBTAINED FROM THE SOILS ENGINEER PRIOR TO THE DISPOSAL OF ANY SUCH MATERIAL.
8. SUBDRAIN LOCATIONS SHOWN ARE APPROXIMATE AND ARE RECOMMENDED FOR ALL SIGNIFICANT FILL CANYONS. THE ACTUAL LOCATION AND EXTENT OF SUBDRAINS SHALL BE DETERMINED BY THE GEOTECHNICAL CONSULTANT AT THE TIME OF CONSTRUCTION.
9. BY REFERENCE HERE, THE REPORT           (TITLE OF GEOTECHNICAL REPORT)           PREPARED BY           (GEOTECHNICAL CONSULTANT)           ON           (DATE)           IS INCLUDED AS PART OF THESE PLANS.
10. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES. LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND SHOWN FOR GENERAL INFORMATION ONLY.
11. WHERE GRADING DOES NOT OCCUR, ALL EXISTING PLANT MATERIAL IS TO BE PROTECTED IN PLACE. NO CONSTRUCTION EQUIPMENT WILL BE ALLOWED TO TRAVEL THROUGH AND DAMAGE ANY OF THESE AREAS. ALL AREAS TO BE RETAINED IN A NATURAL CONDITION SHALL BE FENCED UNDER THE DIRECTION OF THE

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PROJECT BIOLOGIST. CONTRACTOR WILL BE RESPONSIBLE TO REPAIR ANY AND ALL DAMAGE/IMPACTS TO THESE AREAS.

12. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS AND GRADING SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL IN ACCORDANCE WITH SECTION 15.04.140 OF THE CHULA VISTA MUNICIPAL CODE.
13. IN THE CASE OF CONFLICTS, THE REQUIREMENTS OF THE EARTHWORK, SPECIFICATIONS PREPARED FOR THE PROJECT BY THE SOILS ENGINEER SHALL GOVERN THE REQUIREMENTS OF THIS PLAN AND THESE NOTES AND THESE PLANS SHALL BE REVISED ACCORDINGLY.

#### LANDSCAPING NOTES

1. ALL SLOPES SHALL BE PLANTED AND IRRIGATED IN ACCORDANCE WITH PLANS APPROVED BY THE CITY OF CHULA VISTA DIRECTOR OF PARKS AND RECREATION AND CITY ENGINEER. PLANS SHALL CONFORM TO THE CITY OF CHULA VISTA LANDSCAPE MANUAL AND ORDINANCE NO. 1797, BOTH AS AMENDED.
2. FINISH GRADING AND PLANTING SHALL BE ACCOMPLISHED ON ALL SLOPES PRIOR TO OCTOBER 1 OR IMMEDIATELY UPON COMPLETION OF ANY SLOPES GRADED BETWEEN OCTOBER 1 AND APRIL 1. PADS OR OTHER RELATIVELY LEVEL AREAS SHALL BE PLANTED AS DIRECTED BY THE CITY'S DIRECTORS OF PLANNING AND BUILDING DEPARTMENT AND/OR OFFICE OF BUILDING AND PARK CONSTRUCTION.
3. PRIOR TO GRADING, CONTRACTOR SHALL FIELD VERIFY EXISTING IRRIGATION SYSTEMS TO DETERMINE WHICH ARE OPERABLE. UNLESS OTHERWISE NOTED ON THESE PLANS, ALL EXISTING IRRIGATION SYSTEMS ARE TO BE PROTECTED IN PLACE AND REMAIN OPERABLE. CONTACT THE PLANNING AND BUILDING DEPARTMENT AND/OR OFFICE OF BUILDING AND PARK CONSTRUCTION (LANDSCAPING COORDINATION NAME AND PHONE NO., PER SEC. 5-300).

#### EROSION CONTROL NOTES

PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, TEMPORARY EROSION CONTROL SHALL BE PREFORMED AND INSTALLED BY THE CONTRACTOR AS INDICATED BELOW:

1. THE EROSION CONTROL CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION AND MODIFICATION OF THE EROSION CONTROL DEVICES DURING THE RAINY SEASON. THE CONTRACTOR, PERMITTEE OR OWNER SHALL BE RESPONSIBLE FOR THE CONTINUAL MAINTENANCE OF THE EROSION CONTROL DEVICES DURING THE RAINY SEASON. IN THE EVENT OF FAILURE OR REFUSAL TO PROPERLY MAINTAIN SAID DEVICES, THE CITY ENGINEER OR MITIGATION MONITOR MAY CAUSE EMERGENCY MAINTENANCE WORK TO BE DONE TO PROTECT ADJACENT PRIVATE AND PUBLIC PROPERTY, THE COST (INCLUDING AN INITIAL MOBILIZATION AMOUNT) OF WHICH SHALL BE CHARGED TO THE OWNER.
2. SEDIMENTATION BASINS MAY NOT BE REMOVED OR MADE INOPERATIVE WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER AND MITIGATION MONITOR.

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3. TEMPORARY EROSION CONTROL DEVICES, WHICH INTERFERE WITH THE WORK, SHALL BE RELOCATED OR MODIFIED AS THE WORK PROGRESSES, AS RECOMMENDED BY THE ENGINEER OF WORK AND AS APPROVED BY THE CITY ENGINEER AND MITIGATION MONITOR.
  4. ALL REMOVABLE PROTECTION DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT. AFTER EACH RAINSTORM EXCEEDING 1/4 INCH IN A 12-HOUR PERIOD, SILT AND DEBRIS SHALL BE REMOVED FROM CHECK DAMS AND DESILTING BASINS AND BASINS SHALL BE PUMPED DRY AS DEEMED NECESSARY BY THE CITY ENGINEER AND MITIGATION MONITOR.
  5. EFFECTIVE PLANTING SHALL BE INSTALLED, FULLY GERMINATED, AND SHALL EFFECTIVELY COVER THE REQUIRED SLOPES PRIOR TO FINAL APPROVAL. THE PLANTING MIX SHALL BE APPROVED, BY THE DIRECTOR OF PLANNING AND BUILDING AND/OR THE OFFICE OF BUILDING AND PARK CONSTRUCTION, PRIOR TO INSTALLATION. SPRINKLER SYSTEMS ARE REQUIRED ON ALL SLOPES OVER FIVE FEET IN HEIGHT.
  6. A 12 INCH HIGH BY 3 FEET WIDE BERM SHALL BE MAINTAINED ALONG THE TOP OF THE SLOPE OF THOSE FILLS ON WHICH GRADING IS NOT IN PROGRESS. CONCENTRATED WATER SHALL NOT BE CARRIED CLOSER THAN 10 FEET FROM THE TOP OF SLOPES.
  7. SILT BASINS, TRAPS, OR SANDBAGS SHALL BE PROVIDED AT EVERY STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM.
  8. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPE, THE CONTRACTOR SHALL INSURE THAT WATER DRAINING TO THE SUMPS IS DIRECTED INTO THE INLET, AND THAT A MINIMUM OF 1.00' FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. SANDBAGS OR DIKES.
  9. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY.
  10. THE CONTRACTOR SHALL CHECK AND MAINTAIN LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
  11. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH RAINFALL EXCEEDING 1/4" IN A 12-HOUR PERIOD AND WHEN SILT REACHES A DEPTH OF 1.0'
  12. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
  13. DEVICES SHOWN ON THESE PLANS SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE PUBLIC WORKS INSPECTOR AND MITIGATION MONITOR.

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14. THE CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AND MITIGATION MONITOR AFTER EACH RAINFALL WHICH PRODUCES RUNOFF.
  15. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEER OR MITIGATION MONITOR DUE TO INCOMPLETE GRADING OPERATIONS OR UNFORSEEN CIRCUMSTANCE WHICH MAY ARISE.
  16. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
  17. ALL EROSION CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREIN.
  18. GRADED AREA AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY.
  19. IN CASE EMERGENCY WORK IS REQUIRED, CONTACT \_\_\_\_\_ (DEVELOPER'S NAME & PHONE NO.)\_\_\_\_\_.
  20. THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT PROPERTY FROM ANY EROSION AND SILTATION THAT MAY RESULT FROM GRADING OPERATIONS BY APPROPRIATE MEANS (SANDBAGS, HAY BALES, TEMPORARY DESILTING BASINS, SILT FENCES, DIKES, SHORING, ETC.) UNTIL SUCH TIME THAT THE TOTAL PROJECT IS COMPLETED AND ACCEPTED FOR MAINTENANCE BY OWNER.

MISCELLANEOUS

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STATEMENT

(FOR PROJECTS SUBJECT TO NPDES GENERAL PERMIT FOR STORM  
WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES)

DEVELOPMENT OF THIS PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF STATE WATER RESOURCES CONTROL BOARD (SWRCB) (NPDES GENERAL PERMIT NO. CAS000002, WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY. IN ACCORDANCE WITH SAID PERMIT, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND A MONITORING PROGRAM PLAN SHALL BE DEVELOPED AND IMPLEMENTED CONCURRENT WITH THE COMMENCEMENT OF GRADING ACTIVITIES. THE SWPPP SHALL SPECIFY BOTH CONSTRUCTION AND POST-CONSTRUCTION STRUCTURAL AND NON-STRUCTURAL POLLUTION PREVENTION MEASURES. THE SWPPP SHALL ALSO ADDRESS OPERATION AND MAINTENANCE OF POST-CONSTRUCTION POLLUTION PREVENTIONS MEASURES, INCLUDING SHORT-TERM AND LONG-TERM FUNDING SOURCES AND THE PARTY OR PARTIES THAT WILL BE RESPONSIBLE FOR THE IMPLEMENTATION OF SAID MEASURES.

A COMPLETE AND ACCURATE NOTICE-OF-INTENT (NOI) WILL BE FILED WITH THE SWRCB. A COPY OF THE ACKNOWLEDGMENT FROM THE SWRCB THAT A NOI HAS BEEN RECEIVED FOR THIS PROJECT SHALL BE FILED WITH THE CITY OF CHULA VISTA WHEN RECEIVED; FURTHER, A COPY OF THE COMPLETED NOI FROM THE SWRCB SHOWING THE PERMIT NUMBER FOR THIS PROJECT SHALL BE FILED WITH THE CITY OF CHULA VISTA WHEN RECEIVED.

IN ADDITION, THE UNDERSIGNED AND SUBSEQUENT OWNER(S) OF ANY PORTION OF THE PROPERTY COVERED BY THIS GRADING PERMIT NO. \_\_\_\_\_ SHALL COMPLY WITH SPECIAL PROVISIONS REGARDING THE REVOCATION OR CANCELLATION OF NPDES GENERAL PERMIT COVERAGE, AS SET FORTH IN SWRCB ORDER NO. CAS000002, AND ANY SUBSEQUENT AMENDMENTS THERETO AND REISSUANCES THEREOF.

\_\_\_\_\_  
OWNER OF LAND

\_\_\_\_\_  
SIGNATURE OF LAND OWNER, CORPORATE OFFICE, GENERAL  
PARTNER, OR PROPRIETOR

\_\_\_\_\_  
DATE

\_\_\_\_\_  
PRINTED NAME OF ABOVE PERSON

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
PERMIT IDENTIFICATION NUMBER

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OWNERS' CERTIFICATE

IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS. IT IS FURTHER AGREED THAT THE OWNER (DEVELOPER) SHALL HAVE THE ENGINEER OF WORK MAKE SUCH CHANGES, ALTERATIONS OR ADDITIONS TO THESE PLANS, WHICH THE ENGINEER OF WORK DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETION OF THE GRADING. ALL PLAN CHANGES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.

I FURTHER AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING CITY RIGHT-OF-WAY WITHIN 60 DAYS AFTER ISSUANCE OF THE GRADING PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED, IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

NAME: (DEVELOPER FIRM NAME)

ADDRESS:

TELEPHONE:

BY: \_\_\_\_\_ DATE \_\_\_\_\_

SOILS ENGINEER'S CERTIFICATE

I, \_\_\_\_\_ (NAME) \_\_\_\_\_, A REGISTERED CIVIL ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOIL MECHANICS, HEREBY VERIFY THAT A SAMPLING AND STUDY OF THE SOIL CONDITIONS PREVALENT WITHIN THIS SITE WAS MADE BY ME OR UNDER MY DIRECTION BETWEEN THE DATES OF \_\_\_\_\_ AND \_\_\_\_\_. ONE COMPLETE COPY OF THE SOILS REPORT COMPILED FROM THIS STUDY, WITH MY RECOMMENDATIONS, HAS BEEN SUBMITTED TO THE OFFICE OF THE CITY ENGINEER.

THESE GRADING PLANS HAVE BEEN REVIEWED BY ME OR UNDER MY DIRECTION AND CONFORM TO THE RECOMMENDATIONS MADE IN THE SOILS REPORT MENTIONED ABOVE.

SIGNED: \_\_\_\_\_ DATE \_\_\_\_\_

RCE NO. \_\_\_\_\_ EXPIRATION DATE \_\_\_\_\_

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CHULA VISTA IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.



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(NAME OF ENGINEER)	(RCE NO.)	DATE
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**WORK TO BE DONE**

THE WORK TO BE DONE CONSISTS OF THE ITEMS INDICATED UNDER THE "LEGEND" SHOWN BELOW, AND IS TO BE DONE IN ACCORDANCE WITH THESE PLANS AND THE FOLLOWING LIST OR PRINTED MATERIALS AS CURRENTLY ADOPTED BY THE CHULA VISTA CITY COUNCIL INCLUDING THE FOLLOWING:

1. Standard specifications for Public Works Construction ("Greenbook") and Supplements Amendments thereto:
2. San Diego Area Regional Standard Drawings
3. City of Chula Vista Standard Special Provisions (to the Greenbook)
4. Design and Construction Standards of the City of Chula Vista
5. State of California Department of Transportation Standard Plans
6. Standard Specifications, State of California Manual of Traffic Controls

All references are to be made part of these plans. Any changes or revisions therefrom, shall be approved by the City Engineer, or his designee, prior to any request for inspection.

**LEGEND**

- |                  |             |          |
|------------------|-------------|----------|
| 1. (DESCRIPTION) | (Ref. Dwg.) | (Symbol) |
|------------------|-------------|----------|

**AS-BUILTS**

THE CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK, AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS AND GRADING SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL IN ACCORDANCE WITH SECTION 15.04.140 OF THE CHULA VISTA MUNICIPAL CODE.

**PRECONSTRUCTION CONFERENCE**

THE CONTRACTOR SHALL NOT BEGIN ANY WORK ON THIS PROJECT UNTIL A PRECONSTRUCTION CONFERENCE IS HELD WITH THE ENGINEER OF WORK, THE SOILS ENGINEER, ENGINEERING GEOLOGIST, A QUALIFIED PALEONTOLOGICAL MONITOR, A BOTANIST, THE DEVELOPER, THE CITY INCLUDING THE MITIGATION MONITOR AND  
\_\_\_\_\_  
(WATER COMPANY).

**SUBDIVISION MANUAL  
SECTION 4 CONSTRUCTION PLANS**

**Section 4-200 Page 34  
Revised 7/1/2002**

ENGINEER OF WORK CERTIFICATE

I HEREBY CERTIFY THAT IN MY PROFESSIONAL OPINION ALL WORK INCORPORATED IN THE GRADING PLANS SHEET 1 THROUGH SHEET \_\_\_\_ AND AUTHORIZED UNDER GRADING PERMIT NO. \_\_\_\_ HAS BEEN CONSTRUCTED TO THE LINES AND GRADES IN SUBSTANTIAL CONFORMANCE WITH SAID PLANS AND ANY APPROVED REVISIONS.

SIGNED: \_\_\_\_\_ DATE \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_ P.E. NO. \_\_\_\_\_

DISCIPLINE: \_\_\_\_\_ REGISTRATION EXPIRES \_\_\_\_\_

**"DIG ALERT NOTICE"**

SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES THAT DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 AT LEAST TWO WORKING DAYS BEFORE YOU DIG.

As-Built Certificate: To be placed on each plan sheet

"AS -BUILT"	
_____ (Signature)	DATE _____
_____ (Printed Name)	P.E. No. _____
MY REGISTRATION EXPIRES: _____	DISCIPLINE: _____

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